Oak Ridge Operations
Unaddressed Technology Needs

Oak Ridge technology needs are being updated and will be available via Internet December 1, 1997. The FY 1996/1997 version of the needs is accessible at **http://www/em.doe.gov/techneed**.

DNAPL Source Characterization, Containment, and Treatment (HY-01)

New technologies are needed to cost-effectively delineate DNAPL sources and to either contain, in situ treat, or remove the sources so that they may be eliminated from future concern.

Contact: Drew Diefendorf @ 423-241-5997

Horizontal Emplacement Technologies (HY-11)

The ability to cost-effectively bore, jack, or drill and make installations in an oriented or horizontal configuration would greatly enhance DOE's groundwater remediation activities.

Contact: Drew Diefendorf @ 423-241-5997

Removal of Radioactive Contaminants from Aqueous Waste (WM-05)

Improved methods are needed for removing radionuclides such as Cs, Sr, Tc, and Co from aqueous wastes without generating large quantities of secondary waste.

Contact: Jeff Gilpin @ 423-241-2844

Monitoring of Metals in Gaseous Emissions (WM-13)

Systems capable of continuous measurement of total, elemental, and speciated gaseous mercury effluent from DOE waste treatment units are needed.

Contact: Jeff Gilpin @ 423-241-2844

Hydrologic Containment and Control Technologies (HY-16)

Methods and equipment need to be developed to cost-effectively install large-scale hydrologic controls including barriers, cutoffs and diversion, french drains and trench drain collector systems, and reactive barriers.

Contact: Drew Diefendorf @ 423-241-5997

Mercury Removal/Polishing from Discharged Waste Water (HG-05)

Mercury removal/polishing to achieve low mercury concentration in discharged water.

Contact: Jeff Gilpin @ 423-241-2844

Subsurface Barriers and Drains (BW-04)

Placement of horizontal and/or vertical subsurface barriers and drains in or adjacent to buried waste disposal areas to limit the migration of contaminants.

Contact: John Kubarewicz @ 423-220-4943

In Situ Assay Systems (BW-03)

In situ assay systems with the capabilities to non-intrusively or slightly intrusively confirm the presence of high-hazard radioactive and/or mixed waste, define boundaries of buried waste and heavy contamination prior to remedial actions, define water table/waste interaction, define waste activity/volume, define waste containerization/waste form, define waste stability, and provide a basis for verification of remedial action performance specifications as well as long-term performance monitoring.

Contact: John Kubarewicz @ 423-220-4943

Mercury Remediation of Ground and Surface Waters (HG-15)

In situ treatment methods to reduce mercury in UEFPC influent streams from low concentrations (μg/L - mg/L) to extremely low concentrations (ng/L).

Contact: Drew Diefendorf @ 423-241-5997

Reactive Barrier Treatment Systems and Configurations (HY-13)

There is a need to develop technologies that will treat groundwater plumes and seeps by allowing or guiding groundwater to flow through a reactive material.

Contact: Drew Diefendorf @ 423-241-5997